

Asthma in Utah: A Look at the Data



**Utah Department of Health
Asthma Program
March 2002**



Assessing the Burden of Asthma in Utah

- **Mortality**
- **Prevalence**
- **ER Utilization**
- **Hospital Utilization**

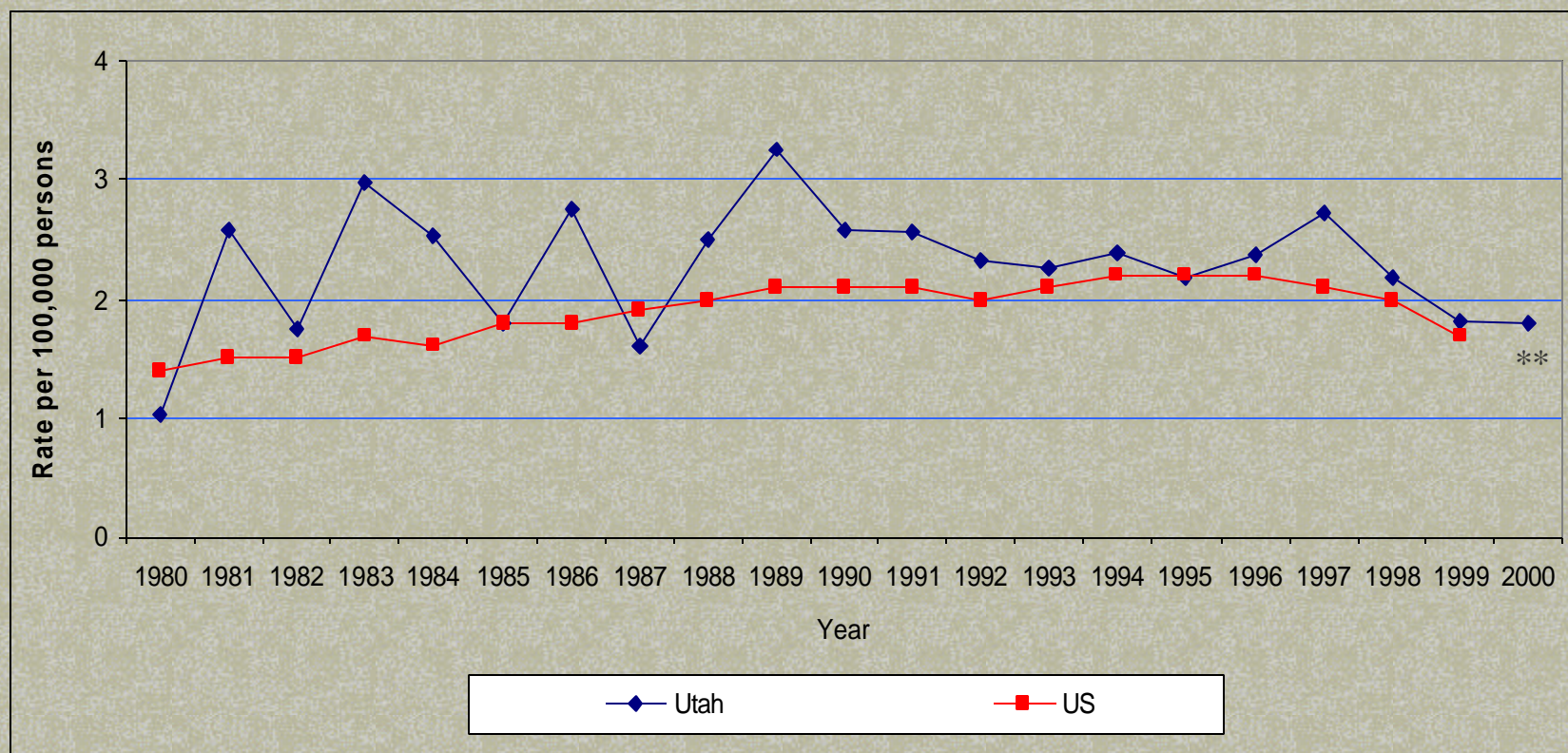


Mortality Data

- **Data Source: Death certificates, Bureau of Vital Statistics (IBIS* Indicator Based Information System)**
- **Asthma listed as underlying cause of death**
- **ICD-9 code (up to 1998): 493**
- **ICD-10 (from 1999)code: J45, J46**
- **Utah Data Availability: 1980-2000**

* <http://ibisph.state.ut.us>

Asthma Mortality Rates, Utah and US:1980 – 1999*




* Rates for Utah and US have been age-adjusted to the 2000 US standard population

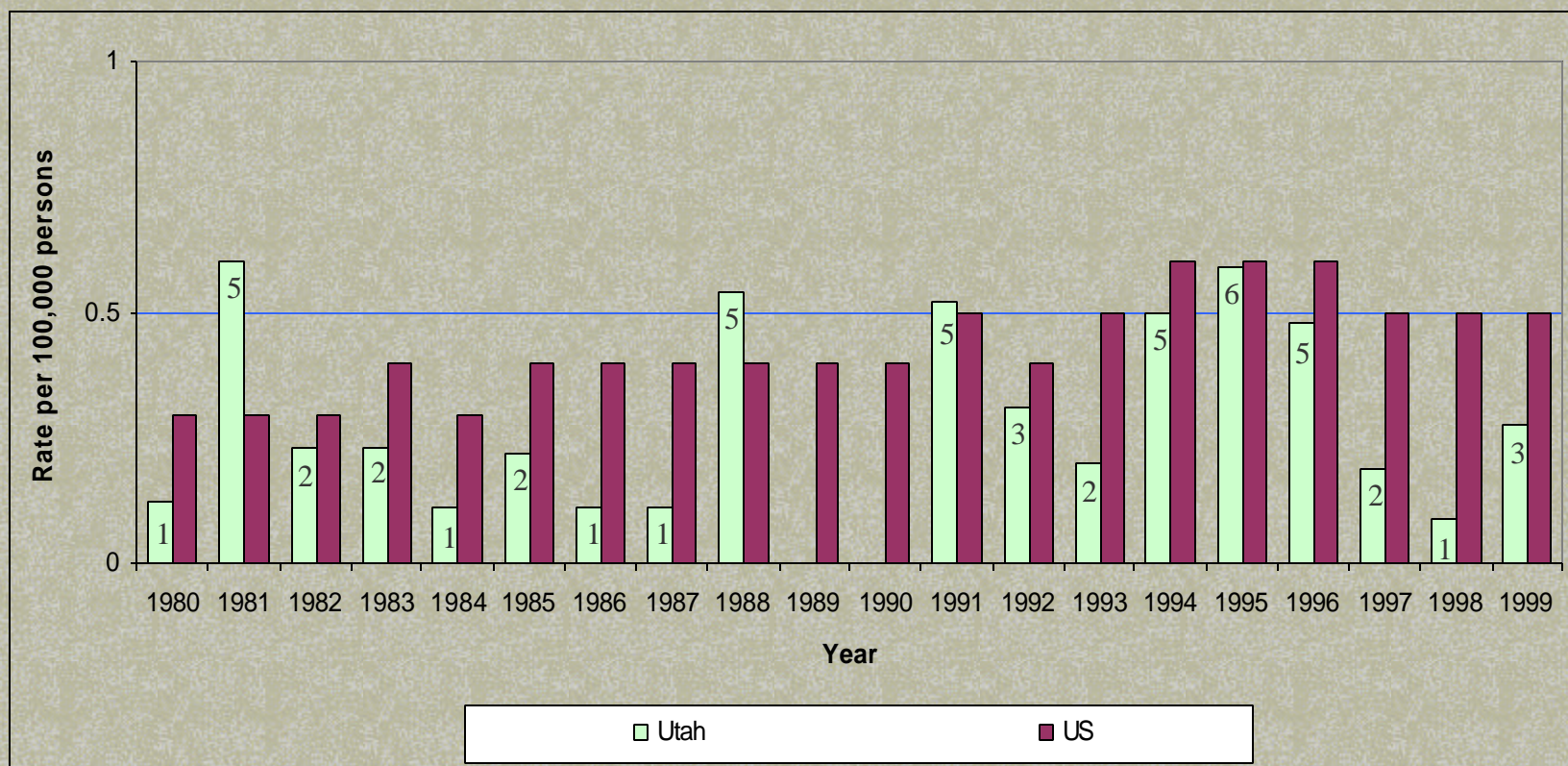
** 2000 US Asthma Mortality data not available.

Note: Utah mortality rates are based on small numbers

Source: National Center for Health Statistics, Utah DOH Vital Statistics via IBIS




Asthma Mortality Rates for Persons 5-34 Years of Age, Utah and US: 1980 – 1999

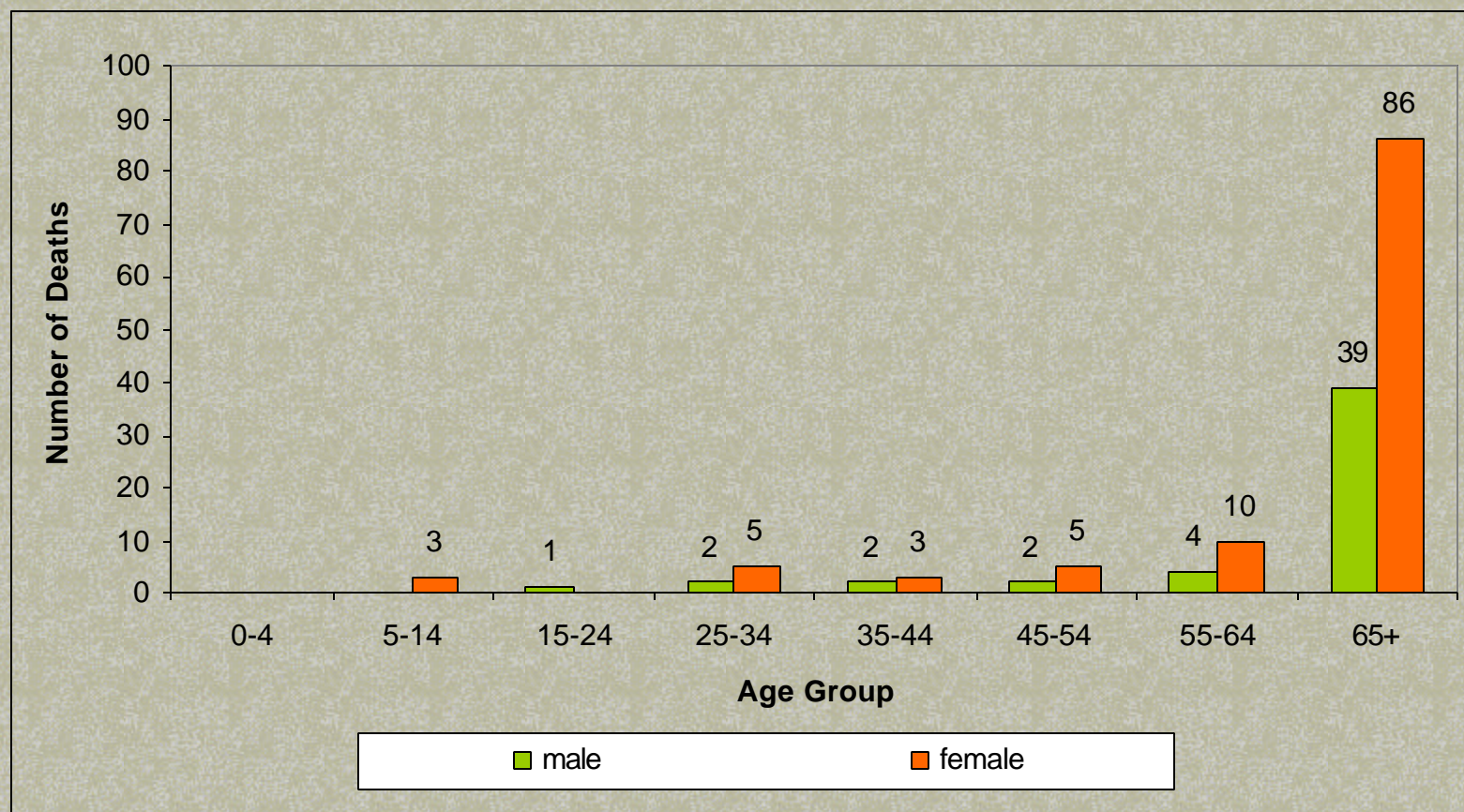


*Number of deaths in Utah shown within green bars

Source: National Center for Health Statistics, Utah DOH Vital Statistics via ACTION 2000



Asthma Deaths by Age and Sex Utah: 1996 - 1999



Source: Utah DOH Vital Statistics via ACTION 2000



Utah's Asthma Prevalence Data

- 2001 Health Status Survey (HSS), all ages
- Behavioral Risk Factor Surveillance System(BRFSS), adults only (18+ years)



2001 Utah Health Status Survey

- **Telephone survey of civilian, non-institutionalized Utah residents**
- **Random selection of one adult (18+) per household (responded for everybody in hh)**
- **Interview period: May-November 2001**
- **Sample of 7,520 household statewide (24,088 individuals)**



2001 Utah Health Status Survey

Definition of Asthma

Survey participants were asked:

- **“Is anyone living in your household currently under medical care for asthma?”**
- **If yes, the respondent was asked to list all household members meeting this criterion.**



Behavioral Risk Factor Surveillance System

- **National data collection program (CDC)**
- **For adult population (18+) only**
- **Method: monthly telephone interviews**
- **Some 3,000 Utahns completed interviews
in 2000**



2000 Utah BRFSS

Definition of Asthma

Adults aged 18 or older were asked:

- “Did a doctor ever tell you that you had asthma?”
and
- “Do you still have asthma?”

If the respondent answered “yes” to both of these questions, then he/she was considered to have asthma.




Asthma prevalence in Utah

2001 Health Status Survey (HSS)

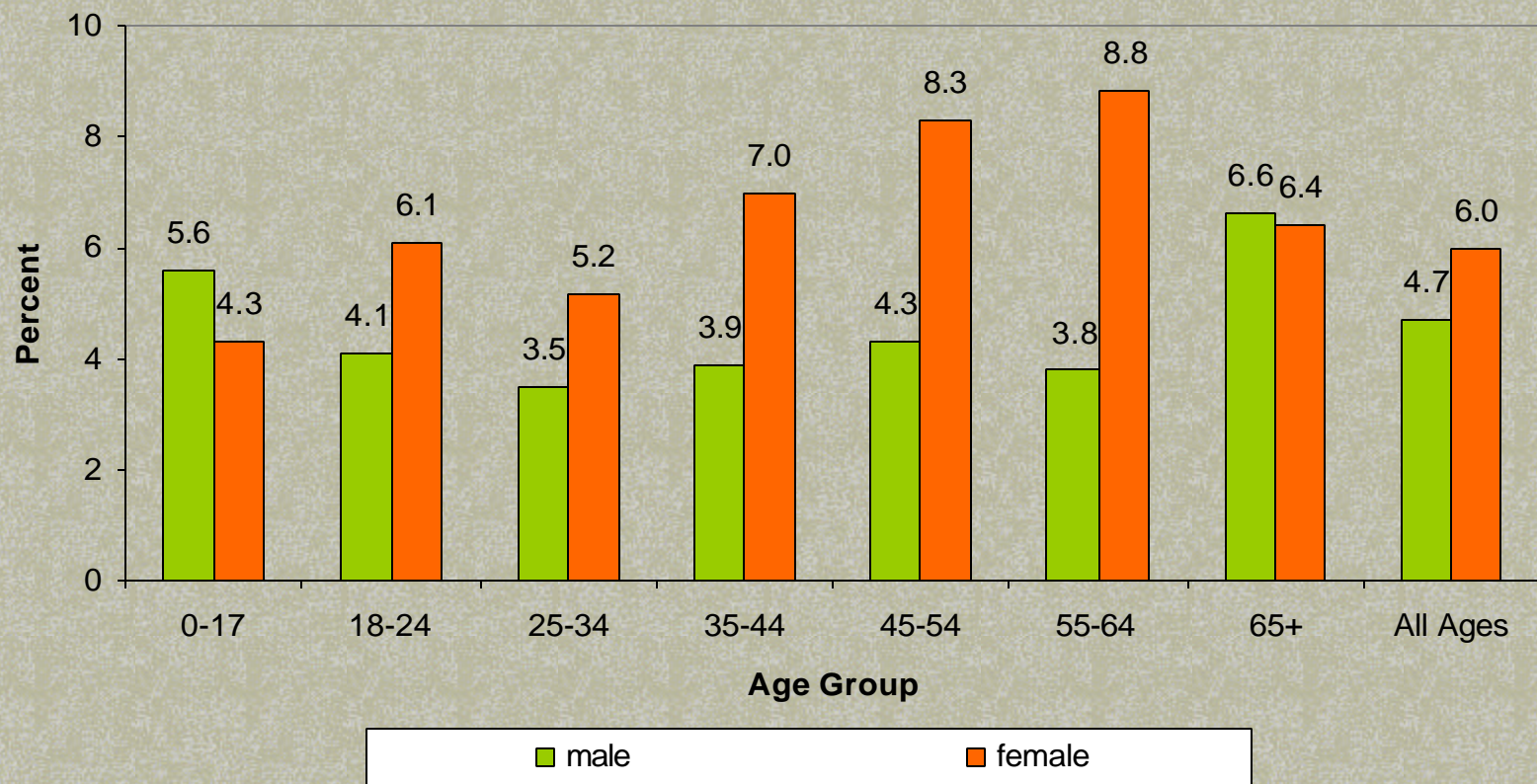
- 5.3% (all ages) or 5.5% (18 years or older)
- Estimated 118,400 Utahns (83,300 Adults)

2000 BRFSS


- 7.96% Utah adults (US: 7.53%)
- Estimated 121,000 Utah *adults*



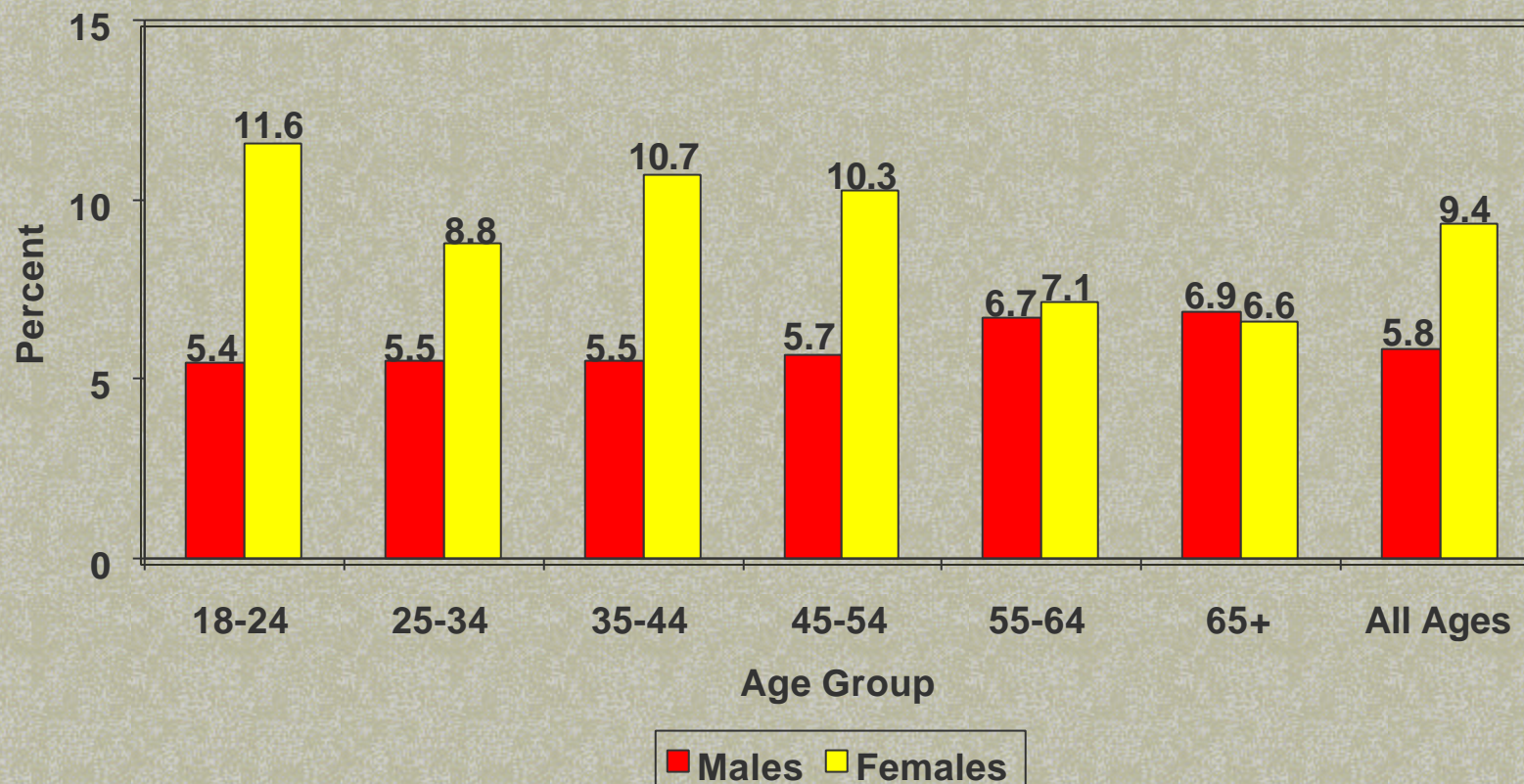
Prevalence of Asthma by Age Group and Sex: All ages, HSS 2001



Source: Utah Health Status Survey, 2001




Prevalence of Asthma by Age Group and Sex Utah Adults 18 or Older: BRFSS, 2000



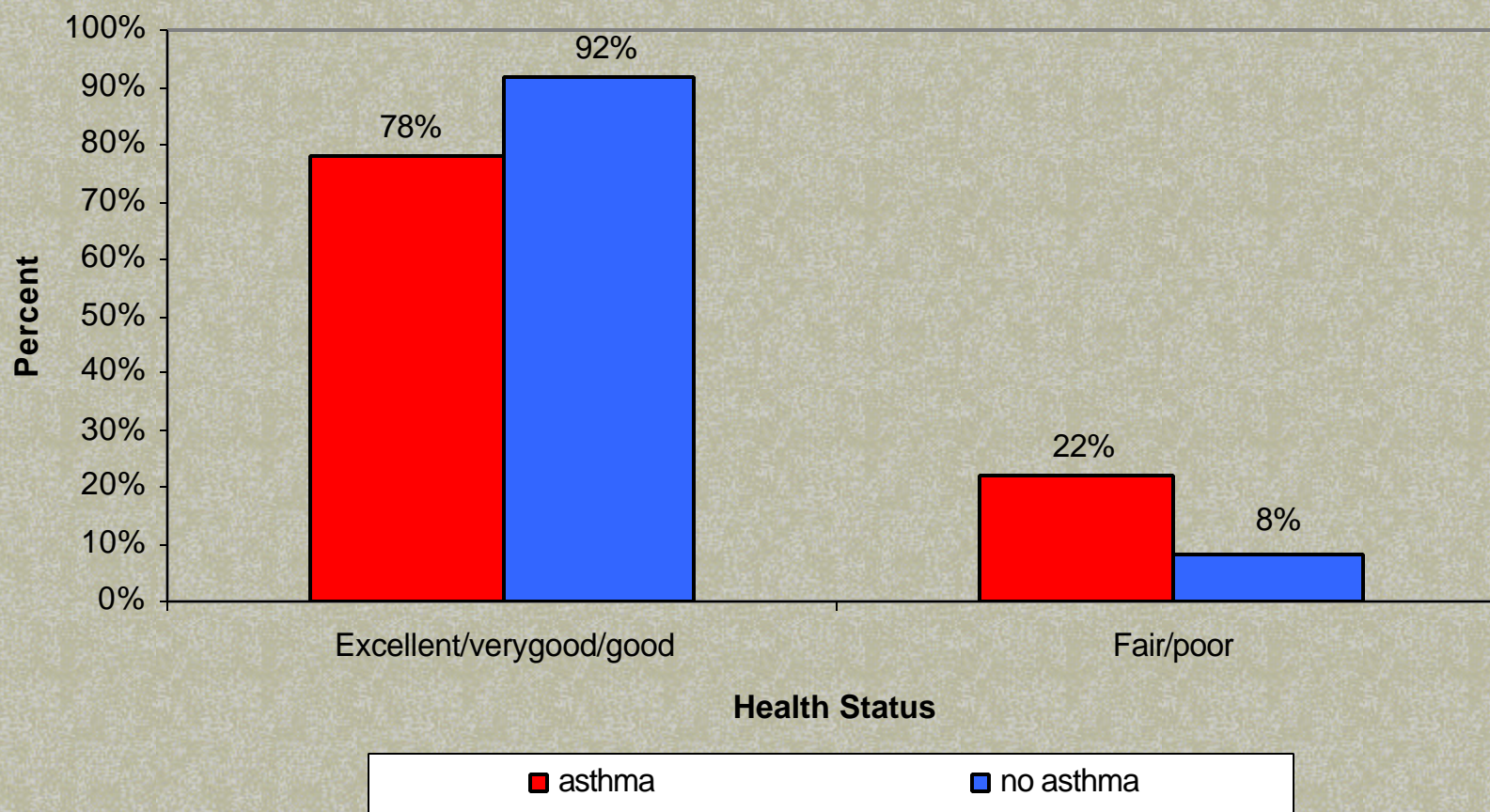
Source: Utah Behavioral Risk Factor Surveillance System, 2000




Perceived Health Status of Asthma Patients



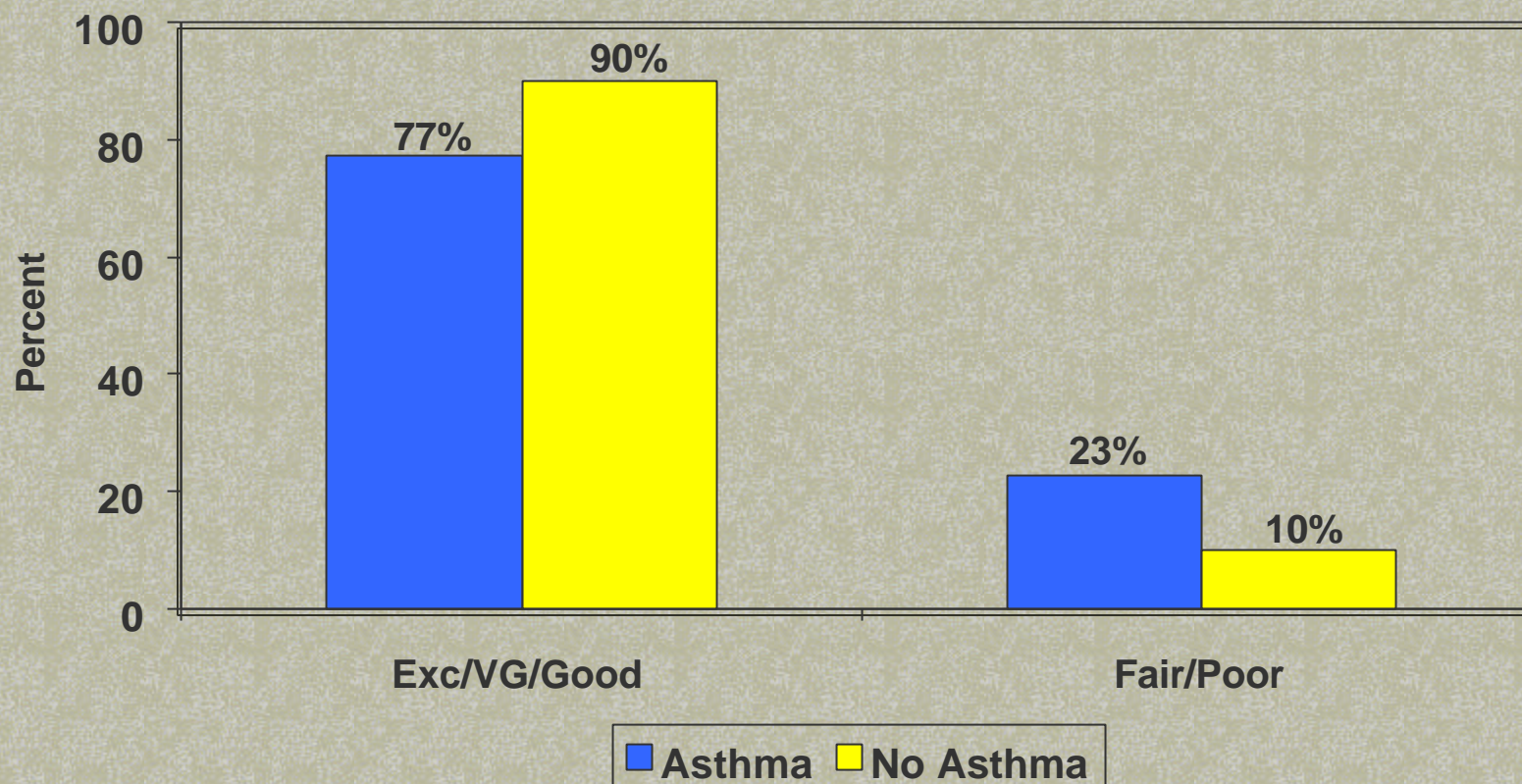
Reported Health Status of Persons With and Without Asthma in Utah, HSS 2001



Source: Utah Health Status Survey, 2001



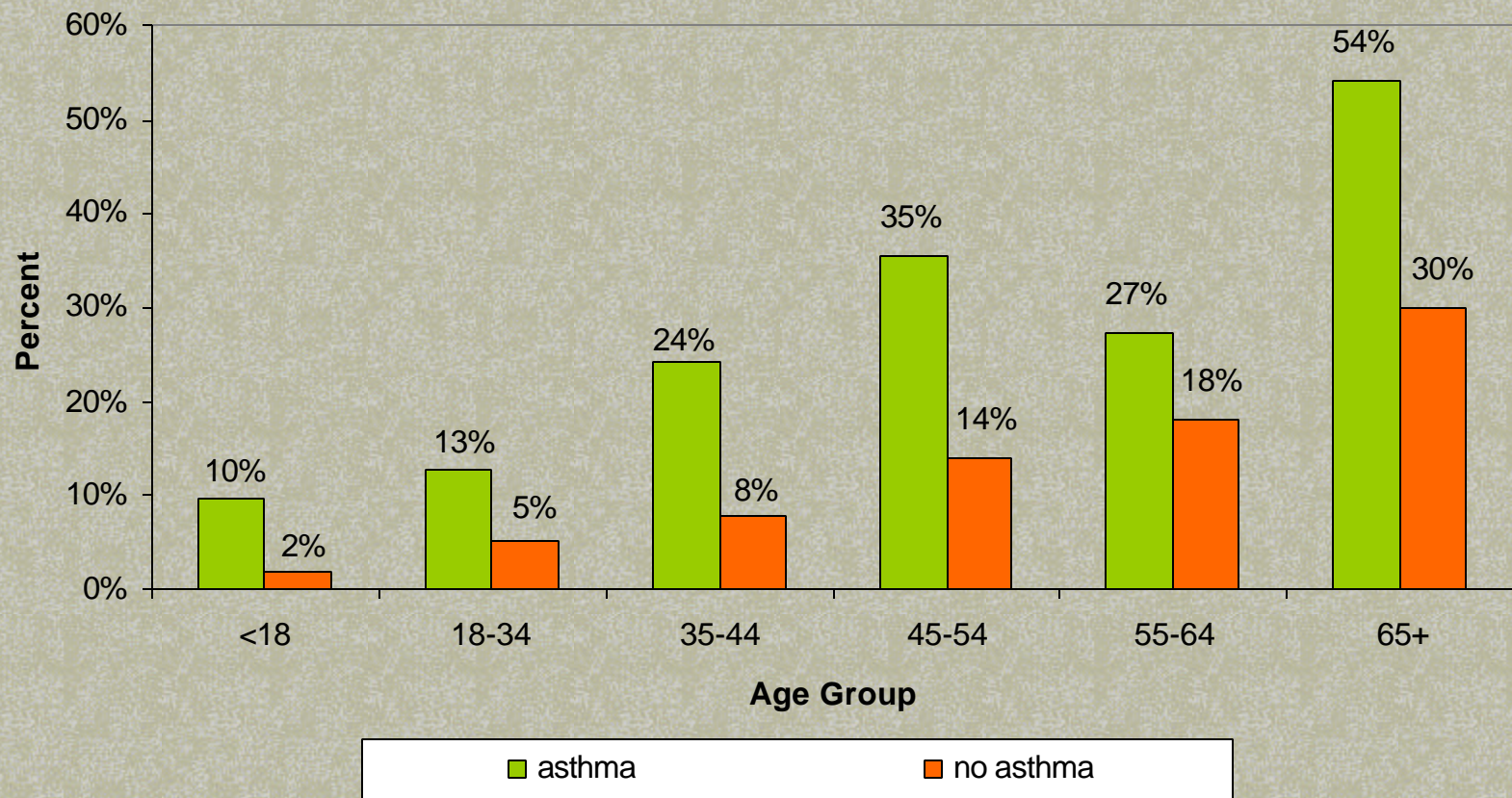
Reported Health Status of Persons With and Without Asthma in Utah, BRFSS 2000 (Adults only)



Source: Utah BRFSS 2000



Percent of Persons with Fair or Poor Health by Asthma Status and Age Group, HSS 2001



Source: Utah Health Status Survey, 2001



Other Burdens of Asthma



ER Visits and Hospitalizations for Asthma in Utah

Primary diagnosis - Asthma (ICD9:493 or ICD10:J45)

ER Visits

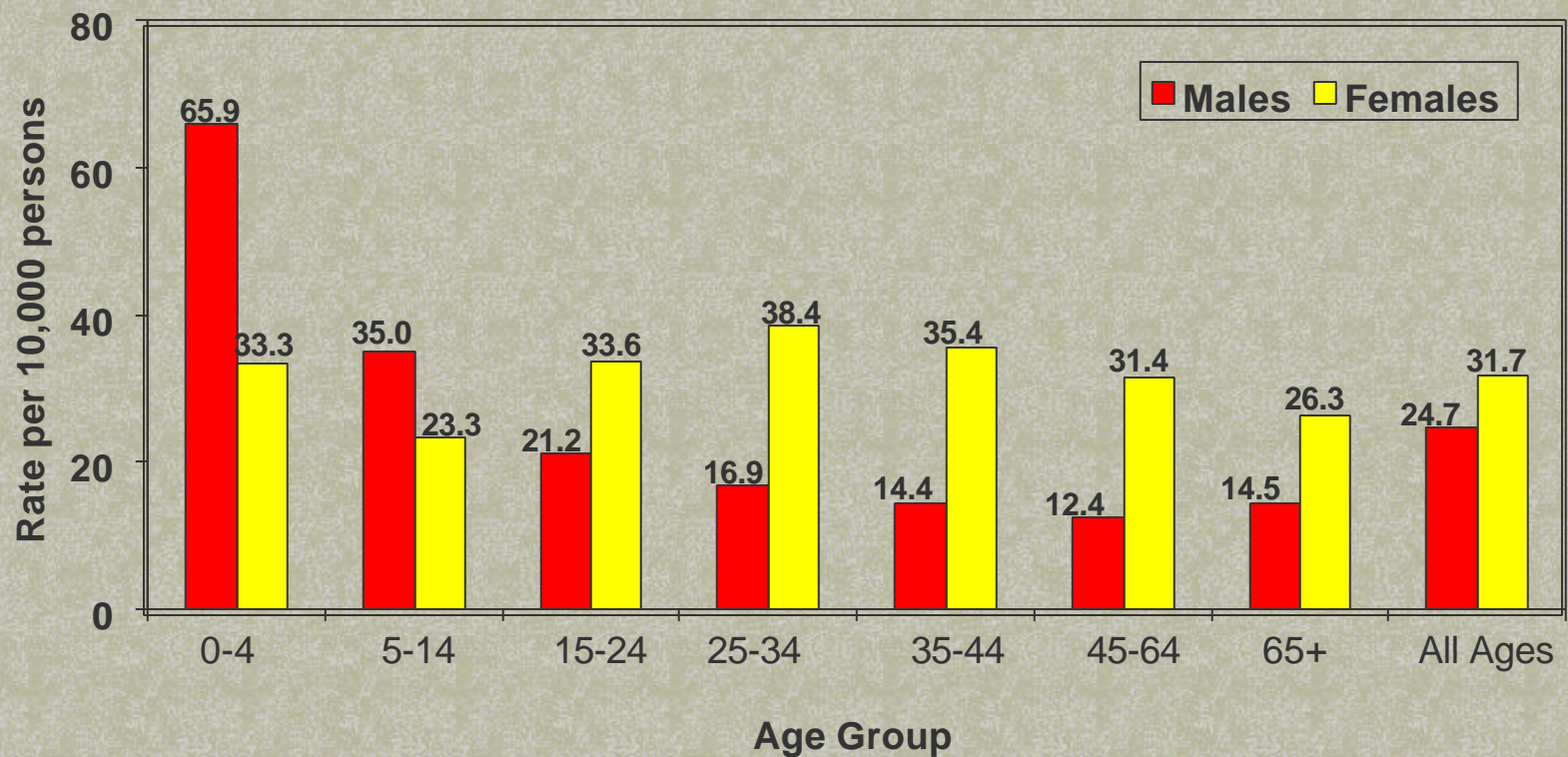
- About 5,300 ER visits in 1998
- 40% for children under 18 years

Asthma Related Hospitalizations

- About 1,400 Hospitalizations in 2000
- 45% for children under 18 years



Rate of Emergency Room Visits for Asthma by Age Group and Sex, Utah 1998

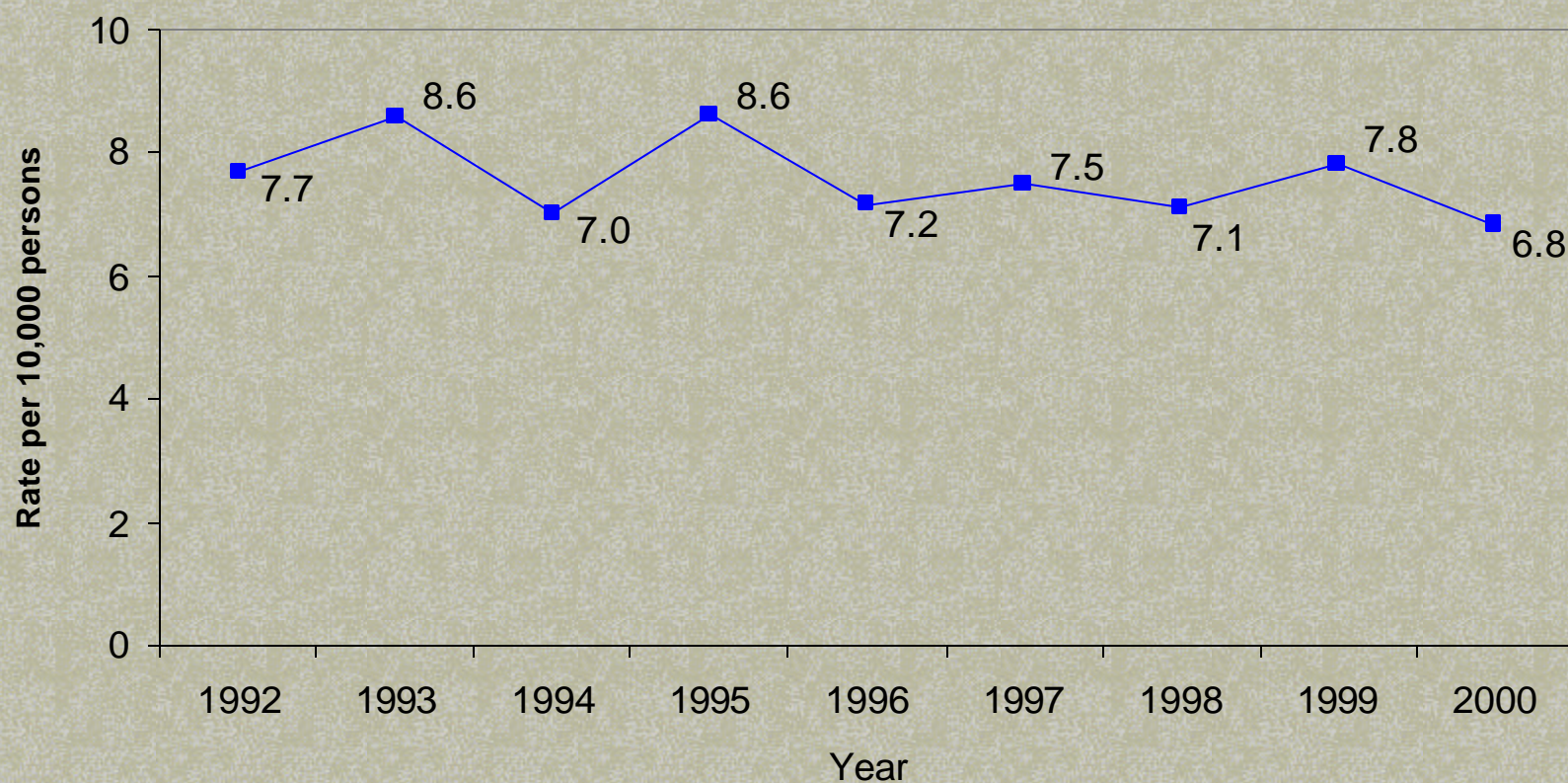


* Includes visits which resulted in hospitalization


Source: Utah DOH, Emergency Room Database 1998



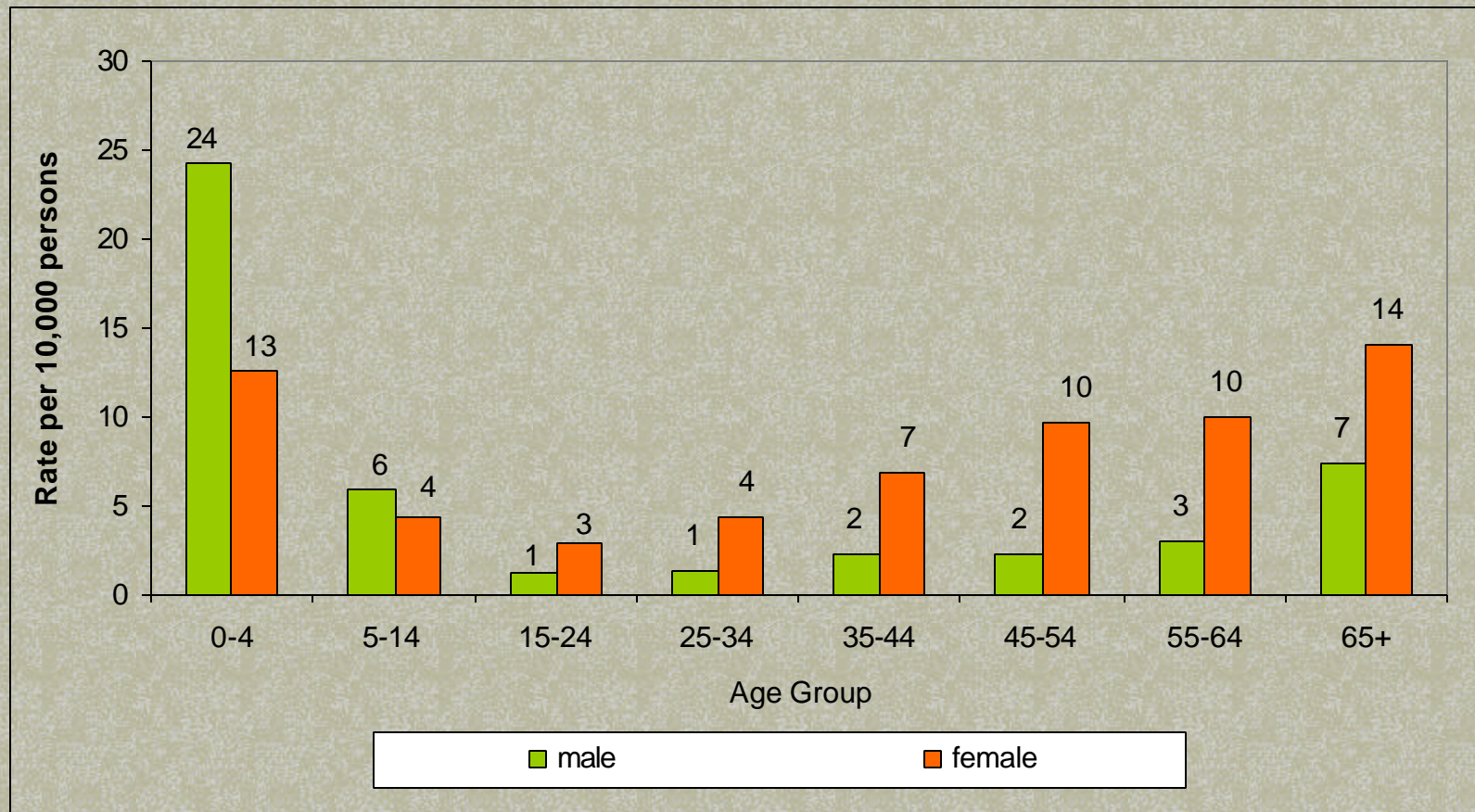
Rate of Hospital Discharges for Asthma, Utah Residents: 1992 - 2000



Source: Utah Hospital Discharge Data, 1992-2000



Rate of Hospital Discharges for Asthma by Age Group and Sex of Utah Residents: 2000



Source: Utah Hospital Discharge Data, 2000



Charges Associated with Asthma Hospitalizations for Utah Residents: 2000

Total Charges

(includes facility and professional charges):

\$ 6,603,413

Average Charges

(the average dollars spent for each asthma inpatient):


\$ 4,304

Per Capita Charges

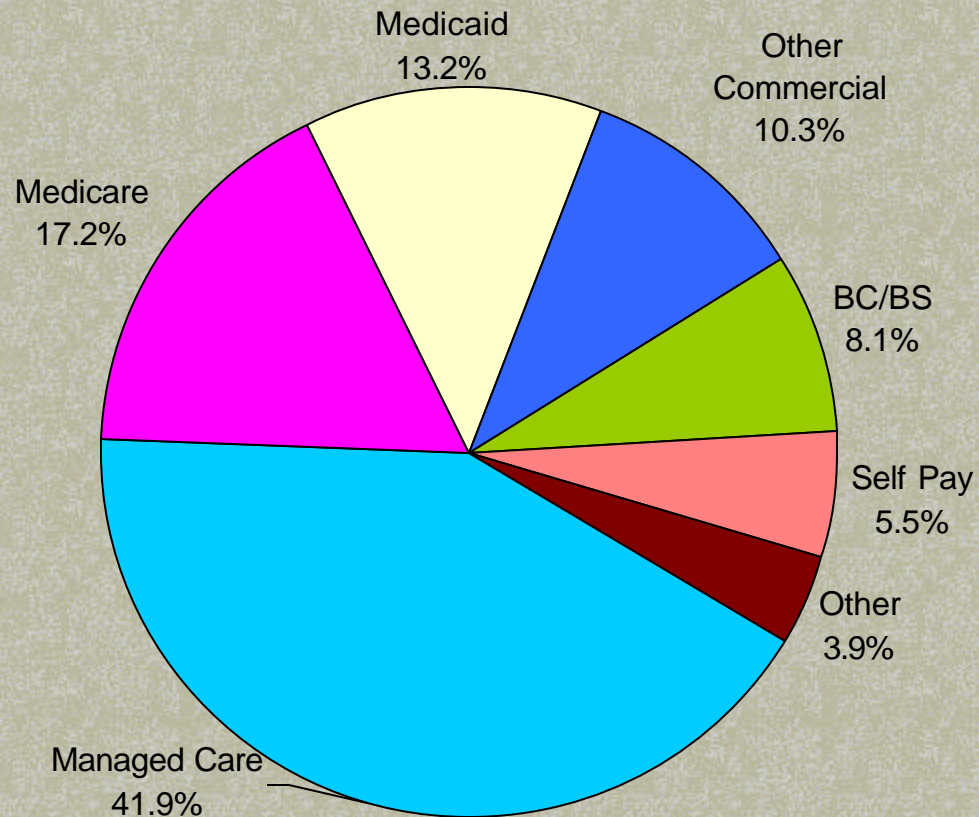
(the average dollars spent for asthma hospitalizations by each Utahn)

\$ 2.93

Source: Utah Hospital Discharge Data, 2000



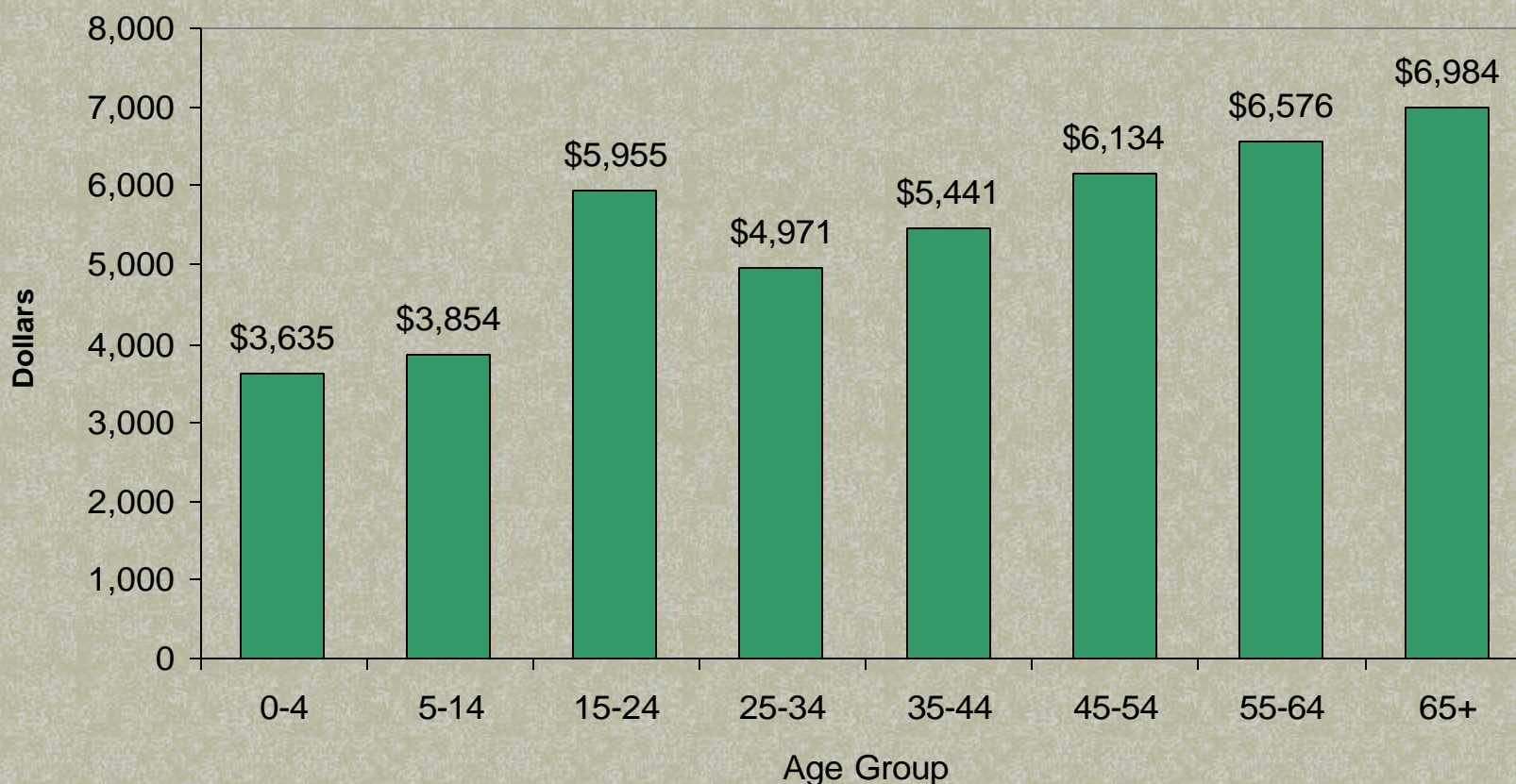
Total Charges for Asthma Hospitalizations by Primary Payer, Utah Residents: 2000



Category "Other" includes Other Government, Unknown Payer, Charity, Worker's Comp
Source: Utah Hospital Discharge Data, 2000




Average Charges for Asthma Hospitalizations by Age Group, Utah Residents: 2000

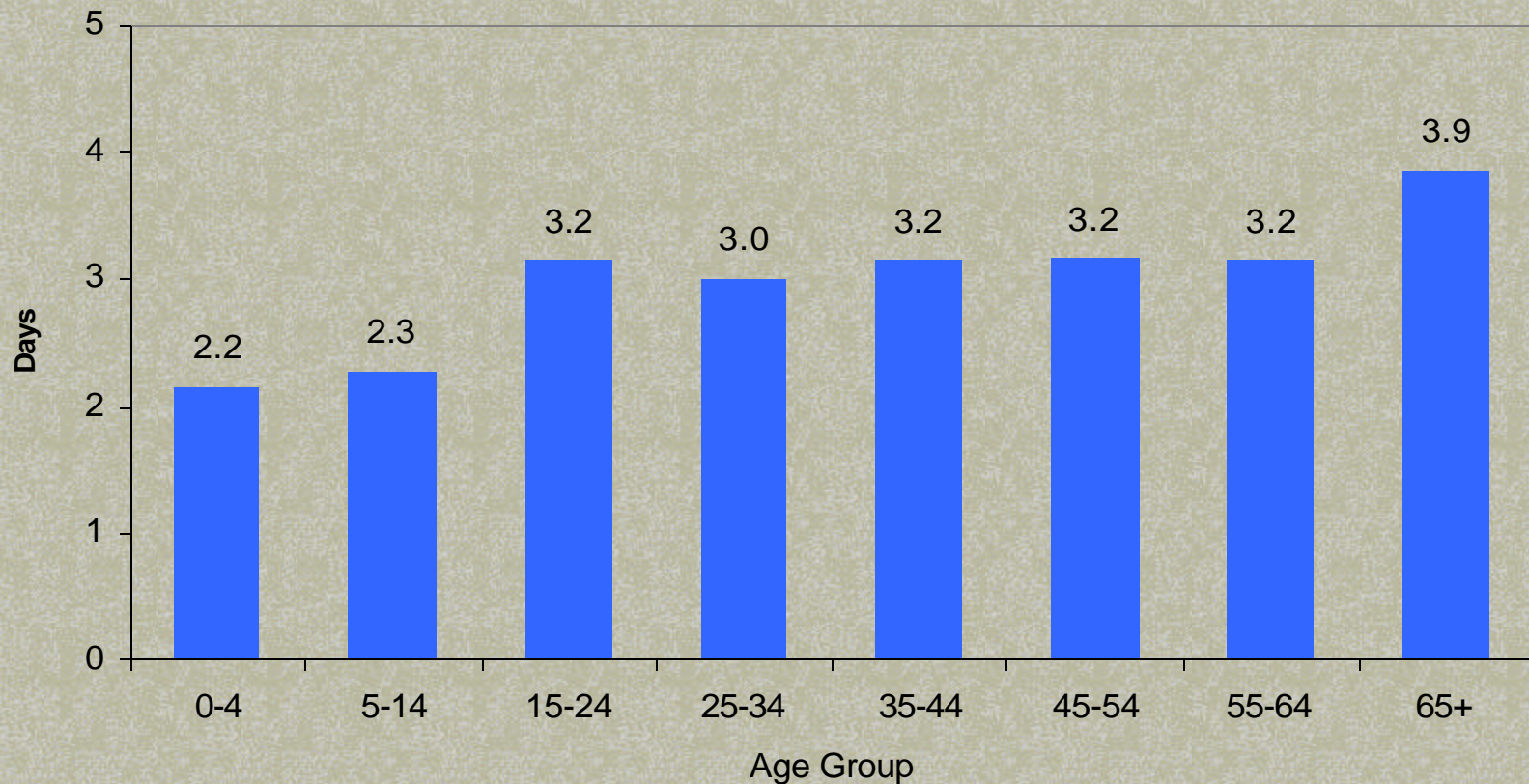


Note: Charges exclude outliers

Source: Utah Hospital Discharge Data, 2000



Average Length of Stay for Asthma Hospitalizations by Age Group, Utah Residents: 2000



Note: Length of stay excludes outliers

Source: Utah DOH, Office of Health Care Statistics



Summary of Data

- Asthma mortality rates are increasing nationally; local rates have not increased appreciably
- Over 118,000 Utahns reported receiving medical care for asthma in 2001; an estimated 83,000 ~ 121,000 adults reported having asthma (HSS 2001, BRFSS 2000)
- Asthma appears to negatively affect one's perception of health status
- Asthma related ER visits by children comprised 40% of all ER visits for asthma in Utah in 1998
- Asthma related hospitalizations by children comprised 45% of all hospitalizations for asthma in Utah in 2000
- Hospitalizations for asthma place an economic burden on Utah's health care system (6+ million/year)



Where do we go from here?

- Further analysis of available data
- Additional data collection